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China - Peoples Republic of

Post: Beijing

National Dairy Standard - Lactose

Report Categories:

FAIRS Subject Report

Approved By:

William Westman

Prepared By:

Mark Petry and Bao Liting

Report Highlights:

On November 20, 2009, China notified the WTO of "National Food Safety Standard of the People's Republic of China for Lactose" as SPS/N/CHN/136. This standard relates to the quality specifications of lactose. The date for submission of final comments to the WTO is January 1, 2010. The proposed date of entry into force has not been specified.

Executive Summary:

On November 20, 2009, China notified the WTO of "National Food Safety Standard of the People's Republic of China for Lactose" as SPS/N/CHN/136. This standard relates to the quality specifications of lactose. The date for submission of final comments to the WTO is January 1, 2010. The proposed date of entry into force has not been specified.

According to the WTO notification, "This standard applies to the production, circulation, supervision

and management of lactose crystallized from whey and produced by drying, grinding etc.. It specifies the terms and definitions, technical requirements, as well as the requirements of production process, packaging, labeling, storage, transportation and testing method for lactose.”

Thanks go to the consortium of industry and 3rd country Embassies in Beijing for their assistance in translating and reviewing this standard.

This report contains an UNOFFICIAL translation of National Standard on Lactose.

General Information:

BEGIN TRANSLATION

The National Standard of People’s Republic of China

Lactose (Draft for approval)

Issued on xx-xx-xxxx

Implemented on xx-xx-xxxx

Issued by the Ministry of Health
of the People’s Republic of China

Foreword

In this present National Standard, the specification on lactose content and pH value is identical to that in Codex Standard 212-1999 of Codex Alimentarius Commission (CAC), *Codex Standard for sugars*.

This present National Standard was proposed by and is under the jurisdiction of Ministry of Health, the the People’s Republic of China.

Lactose

1. Scope

This present National Standard specifies the terminology and definition, technical requirement, manufacturing process, package, label, store and transportation, and inspection method for edible lactose.

This present National Standard is applicable to the manufacture, circulation, supervision and management of lactose resulted from crystallization of whey through the processes including

drying and grinding.

2. Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this present standard. Note: As for the dated references, all the amendments or revisions after them except the corrigenda are not applicable to this present standard. However, parties to agreements based on this present national standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. As for the references that are not dated, their most recent editions are applicable to this present national standard.

- GB 4789.4 Microbiological examination of food hygiene - Examination of Salmonella
- GB 4789.10 Microbiological examination of food hygiene - Detection of staphylococcus aureus
- GB 4789.18 Microbiological examination of food hygiene - Examination of milk and milk products
- GB 5009.3 Determination of moisture in foods
- GB 5009.4 Determination of ash in foods
- GB 7718 General standard for the labeling of prepackaged foods
- GB 12693 Good manufacturing practice for dairy product factory

3. Terminology and definition

The following terminology is applicable to this present National Standard.

3.1 Lactose:

Lactose is a kind of carbohydrate extracted from whey, which exists in an anhydrous form, a form containing one molecule of crystal water or the mixture of both.

4. Technical requirement

4.1 Requirement on raw materials.

Cheese whey or casein whey can be used.

4.2 Sensory indices

They should comply with the specification in Table 1.

Table 1 Sensory indices

Item	Requirement
Color	White to yellowish color
Flavor and taste	Slightly sweet without foreign smell.
Texture	Crystal or powder crystal

4.3 Physical and chemical indices

They should comply with Table 2.

Table 2 Physical and chemical indices

Item	Requirement
Lactose (dry base)/ (g/100g) \geq	99.0
Water/ (g/100 g) \leq	1.0
Ash (g/100 g) \leq	0.3
pH (10% water solution)	4.5 ~ 7.0

4.4 Microbial indices

They should comply with Table 3.

Table 3 Microbial indices

Item	Sampling plan and limit
Salmonella	n=5, c=0, m=0/25 g
Staphylococcus aureus	n=5, c=0, m=0 cfu/ g

5. Manufacturing process

Comply with GB 12693.

6. Package

The packaging materials should be durable and moisture-proof. The packaging container and material should comply with related standards and specifications.

7. Label

The labeling of prepackaged products should comply with GB 7718.

8. Storage and transportation

During transportation, sunshine or rain should be avoided. It should not be transported together with any harmful or toxic substances, or with substances that have foreign smell or can affect the quality of product.

9. Inspection method

9.1 Sensory indices

Take an appropriate amount of sample in a white plate, and carry out sensory inspection of sample.

9.2 Physical and chemical indices

9.2.1 Lactose: Lactose = 100 – moisture.

9.2.2 Moisture: Determine in accordance with GB 5009.3.

9.2.3 Ash: Determine in accordance with GB 5009.4.

9.2.4 pH value: Weigh 10 g of lactose in a 100 mL beaker, add distilled water to prepare a 10% water solution. Test the pH value with pH test strips or pH meter.

9.3 Microbial indices:

The apparatus, materials, sampling plan, pretreatment of test sample for inspection of

microbial indices should comply with GB 4789.18.

11.3.1 Salmonella: Determine in accordance with GB 4789.4.

11.3.2 Staphylococcus aureus: Determine in accordance with GB 4789.10.